

## Notes on the identity of *Calamus delessertianus* Becc.

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### Abstract

*Calamus delessertianus* Becc. was originally reported from South India based on a collection by Roxburgh. Later Beccari suggested that this species should be eliminated since he suspected the Roxburghian material as a specimen of *C. tenuis*. A detailed study of the rattans of India has proved that the Roxburghian species is not *C. tenuis* and *C. delessertianus* is a separate species. In this paper a complete description of this species is given and the field identification features are discussed.

### INTRODUCTION

Beccari in 1908 established the species *Calamus delessertianus* Becc. based on a specimen collected by Dr. Roxburgh and kept in the Herbarium Delessert. The entire Roxburghian specimen consisted of a portion of a leaf probably from above its middle and one partial inflorescence with the upper part of its sheath. The material was collected from South India. According to Beccari this species differ from any other South Indian species by its numerous, equidistant, ensiform, sub 5-constulate leaflets; the closely sheathing, tubular, coriaceous primary spathes and the elongate spikelets; the bracteiform involucrophorum and the numerous perfectly bifarious flowers. But again in 1913 in his Supplement Volume on Lepidocaryeae, Beccari stated that "this species apparently must be suppressed, as it seems to me now that the specimens with female flowers represented in plate 101, upon which the species was established, represented only parts of a luxuriant from of *C. tenuis* Roxb." Blatter (1926) followed Beccari (1908) and included *C. delessertianus* in his work. But Fischer (1931) did not include this species in his flora. Basu (1992), included this species, since a recent collection (Nair, 64536 MH) appeared closer to the description of *C. delessertianus*.

Recently an exploration and field study of the rattans of India was undertaken during which I have been able to recollect both Roxburgh's material from South India and *C. tenuis* Roxb. My observation, however, contradict Beccari's idea that the Roxburghian specimen is *C. tenuis*.

A close observation of the original Roxburghian specimen and *C. tenuis* reveal that these specimens are not one and the same. Moreover, Roxburgh had clearly stated that his collection is from South India. *C. tenuis* is not occurring naturally in South India (Renuka, 1992) and this is reported only from North and North East India (Basu 1992).

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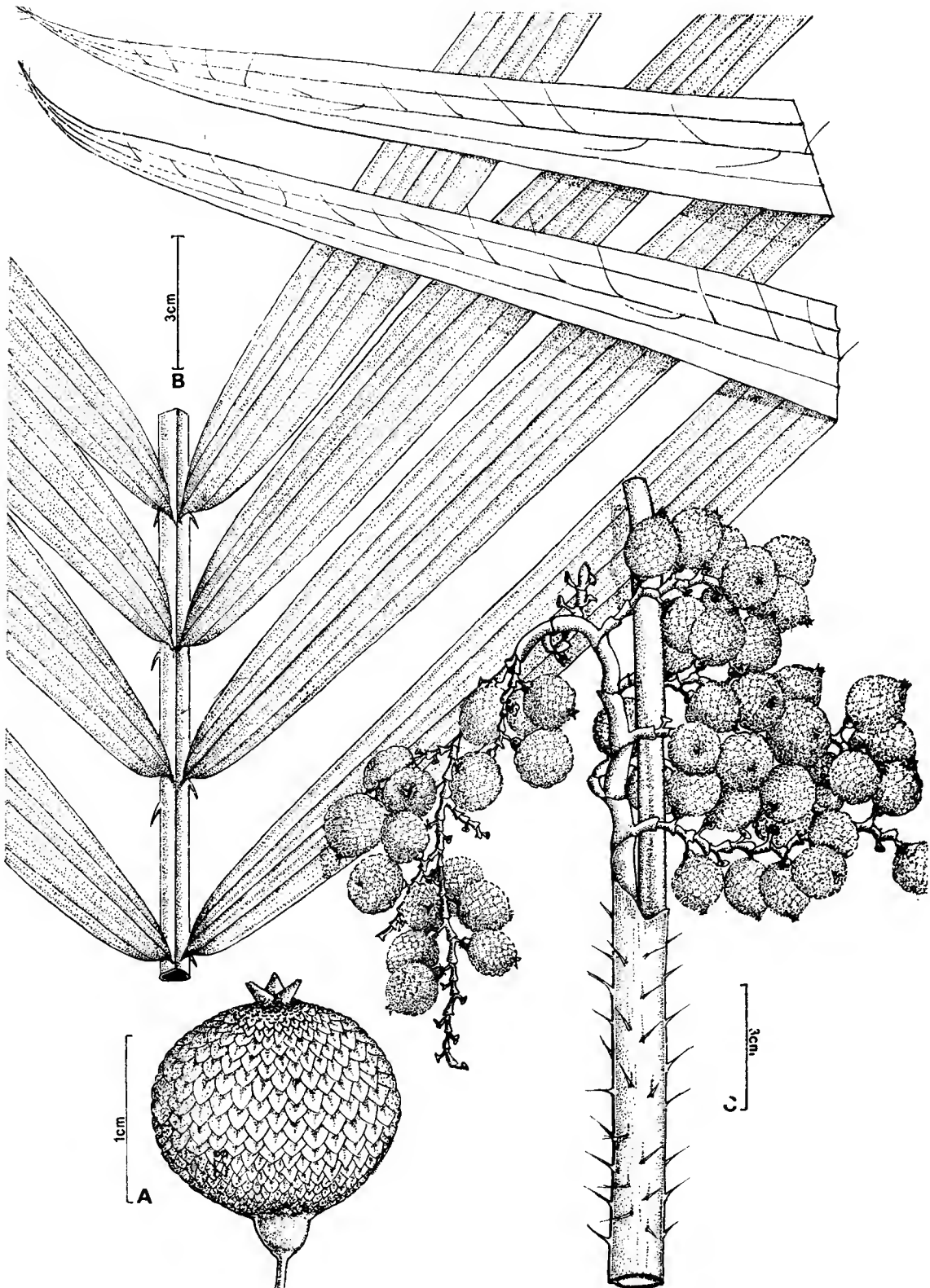


Fig. 1. *Calamus delessertianus* : A. Single fruit enlarged; B. A portion of the leaf; C. A portion of the inflorescences.

### Identity of *Calamus delessertianus*

In fact, these two plants look very different in the field and can easily be recognised by the very size of the cane, the nature and size of the leaf and leaflets, the nature of inflorescence and fruits. *C. tenuis* is a clump forming, slender cane, (with sheath 1-2.5 cm in diameter). The leaves are 1 m long. Inflorescence is slender, flagelliform, and partial inflorescence is 15-25 cm long. Fruit is broadly ovoid, grey white on ripening and about 1.4 x 1 cm. Scales are arranged in 15 vertical rows and are narrowly channelled in the middle. The South Indian specimens are single stemmed with moderately thick cane, (with sheath 3-5 cm in diameter) with larger leaves (2 m long) and leaflets. The fruit also is different from that of *C. tenuis* in being spherical, 1.5 cm in diameter, scales in 28 vertical rows and deeply channelled in the middle. The spiral arrangement of the scales is conspicuous in this species.

From the study, it becomes apparent that Roxburghian specimens are not *C. tenuis* Roxb. but it is a separate species as Beccari originally pointed out. Now, as complete collections of the plant is available, a revised description of *C. delessertianus* is provided.

***Calamus delessertianus*** Becc., Ann. Roy. Bot. Gard. Calcutta 11:276, pl. 101. 1908; Basu, Rattans in India Monog. Rev. 92. 1992; Renuka, Rattans of Western Ghats. Tax. Man. 23, 1992.

Vern. Paccha chural; Ottamoodan (Fig. 1; A-C).

Solitary, medium diameter rattan. Stem to 40 m long or more; with sheaths 3 cm in diameter at base, 5-6 cm at the apex, without sheaths 2-2.5 cm. Leaf 2 m. long, ecirrate; sheath dark green, spiny, spines bulbous based; petiole 50-60 cm long; rachis spiny; leaflets regular, 55 x 2.5 cm, linear lanceolate; veins ciliated; cilia to 1.5 cm long, black tipped; leaf margin spinulose. Female inflorescence rather large; primary sheath coriaceous, tubular, closely sheathing at base, splits open slightly at the mouth, densely armed; partial inflorescence to 30 cm long, attached inside the sheath, recurved, basal ones some times branched. Fruits spherical, 1.5 cm in diameter, distinctly stalked, stalks 3-10 mm long; scales straw yellow, spirally arranged, distinguished into 28 vertical series, deeply channelled in the middle; endosperm ruminant.

*C. delessertianus* can easily be confused with *C. gamblei* and *C. dransfieldii* in the field, especially in the vegetative condition. This species can be differentiated from *C. gamblei* from its single stemmed habit and from the presence of long cilia on the veins of the leaflets. The fruits of *C. delessertianus* is spherical with 1.5 cm in diameter. The scales are straw yellow coloured which are arranged spirally and can be distinguished into 28 vertical series. The fruit of *C. gamblei* is spherical or ovoid with a slightly tapering base. Scales are golden yellow, shiny and are arranged in 23 vertical series.

This species can be differentiated from *C. dransfieldii* from its dark green coloured heavily spined leaf sheath and the dark green leaflets. In *C. dransfieldii* the leaf sheath is pale green (greyish) and is very sparingly spiny. The leaflets are of light green colour. The leaflets are more closely set than that of *C. delessertianus*.

**C. Renuka****Acknowledgement**

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